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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,949

02/03/2006

Shigeru Ichihara

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EXAMINER

LEADER, WILLIAM T

ART UNIT

PAPER NUMBER

1795

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/566,949	Applicant(s) ICHIHARA ET AL.	
	Examiner WILLIAM T. LEADER	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 7-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/03/06; 04/13/07; 07/02/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election of Group I, claims 1-6 in the reply filed on April 28, 2008, is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent publication 10-212592 to Kobayashi et al in view of Sallo et al (US 3,032,486).

5. The Kobayashi et al publication is directed to a platinum alloy plating bath. The plating bath includes a platinum compound and a compound of an iron-group metal, such as iron, nickel or cobalt. See paragraph [0004] of the English language machine translation. The platinum concentration in the bath is 0.5-10 g/l (approximately 0.0026 - 0.05 mol/l) in general. See paragraph [0005]. Paragraph [0007] discloses that the concentration of nickel, the iron-group metal, is 1-10 g/l (0.017 - 0.169 mol/l) in general. Choice of a platinum concentration and an iron concentration from within these disclosed ranges, such as 0.05 mol/l of platinum and 0.05 mol/l of iron-group metal, result in a ratio within the range recited in instant claim 1.

6. The composition of claim 1 differs from the composition of Kobayashi et al by reciting the inclusion of a complexing agent. The Sallo et al patent is directed to a plating bath for electrodeposition of ferromagnetic materials. The plating bath contains an iron salt such as ferrous chloride. Sallo teaches that since hydrated oxides of iron precipitate even in acid baths, it is necessary to utilize a complexing agent to maintain the plating bath in solution. The preferred complexing agent is ammonium citrate (column 2, lines 16-21).

7. The prior art of record is indicative of the level of skill of one of ordinary skill in the art. It would have been obvious at the time the invention was made to have included a complexing agent such as a citrate compound in the composition of Kobayashi because it would have helped maintain the iron in solution as taught by Sallo. Choice of concentration values for platinum and the iron-group metal from within the ranges disclosed by Kobayashi would have been obvious and, as indicated above, would have resulted in the iron to platinum ratio recited by applicant.

8. With respect to claim 2, the complexing agent disclosed by Sallo is a citrate compound. With respect to claim 3, the range of concentration of Fe recited overlaps that disclosed by Kobayashi. Choice of a value from within the range disclosed by Kobayashi would have been obvious.

9. Instant claim 4 recites a pH range of 5.0 – 10.5. Kobayashi discloses a pH range of 11-13. See paragraph [0009]. The upper end of applicant's range and the lower end of the range of Kobayashi do not overlap but are very close. It has been held that a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 227 USPQ 773 (Fed. Cir. 1985).

10. With respect to claim 5, the citrate suggested by Sallo would have served to complex with platinum as well as iron so that both an iron complex and a platinum complex would have been formed.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1-3, 5 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Daimon et al (US 2004/0074336).

13. The Daimon et al patent is directed to the production of metal particles for use in magnetic recording. The particles may comprise iron, platinum and copper. See ex. 41 – ex. 45 in Table 2 on page 13. In example 41 the composition was Fe₄₀Pt₄₅Cu₁₅. In the process of making the particles, Daimon creates a solution in which a salt or a complex of Fe, a salt or a complex of Pt, and a salt or a complex of Cu are dissolved in alcohol alone, water and an alcohol, or an alcohol and an organic solvent. See page 4, paragraphs [0049] - [0053]. Paragraph [0056] discloses that the iron complex may be iron (III) citrate n-hydrate, showing that citrate was used

as a complexing agent. In example 41, 0.62 millimoles of an iron (III) complex and 0.62 millimoles of a platinum (II) complex were added to 100 ml of ethylene glycol. In terms of moles per liter, the concentration would have been 0.0062 mol/l of iron complex and 0.0062 mol/l of platinum complex. The iron complex and platinum complex are present in equal molar amounts so the ratio would have been 1:1. All limitations of the composition recited in instant claim 1 are met by the solution of Daimon et al. It is noted that instant claim 1 recites a “plating” solution. The recitation of an intended use does not serve to distinguish the composition recited in claim 1 from the composition disclosed by Daimon.

14. With respect to claim 2, Daimon discloses an iron citrate complex. With respect to claim 3, the concentration of Fe disclosed in example 41 of Daimon falls within the range recited by applicant. With respect to claim 5, the solution of example 41 contained both a Fe complex and a Pt complex. With respect to claim 6, example 41 additionally contained a copper complex.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Albon et al (US 5,102,509) is directed to a bath for plating platinum and discloses that citrate forms a complex with platinum (column 2, lines 19-21).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM T. LEADER whose telephone number is (571) 272-1245. The examiner can normally be reached on Mondays-Thursdays and alternate Fridays, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Susy Tsang-Foster can be reached on 571-272-1293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

William Leader
/Susy Tsang-Foster/
Supervisory Patent Examiner, Art Unit 1795